tube it exfoliates and gives off water. In optical characters it is identical with common talc, having been found to have an axial divergence of about 12°40′, frequently distorted. It is marked with striations or cleavage planes crossing at angles of 60° and 120°. In this respect it is like Jefferisite or Culsageeite, while in common talc such markings are rarely visible, and never distinct. It has the chemical composition of talc, except that the percentage of water is larger than usual, being 7.02 per centum. None of this water is hygroscopic, as its weight remains constant in a desiccator over sulphuric acid.

The water of two other talcs from the same locality was determined. A massive talc which does not exfoliate in the Bunsen burner flame or in the platinum crucible, but does so at the point of the blowpipe flame, contains 4.23 per centum of water.

A foliated talc which is caused to exfoliate only very slightly even in the blowpipe flame, contained 2.84 per centum of water, and this was driven off only at an extremely high and long continued heat.

In these three talcs, therefore, we have the interesting results:

1. That there is a direct ratio between the amount of combined water and the amount of exfoliation.

2. That there is a direct ratio between the tenacity with which the water is held and the temperature at which exfoliation occurs.

It is thought that perhaps these results may have a bearing in an explanation of the properties of the various Vermiculites.

JANUARY 28, 1878.

Tin in North Carolina.—Mr. LEWIS exhibited a small piece of tin ore said to have been found in Surry Co., N. C., and which had been handed to him for examination. It was a soft, light earthy mass of a brown color, crumbling when pressed, which, when held in a candle flame, became covered with small globules of pure tin. The earthy base was a silicate of alumina, iron, and lime, and was partially soluble in acid. The tin was reduced by very gentle heat, far less than that required to reduce Cassiterite. It was suggested that the tin existed in it either native or as an ochre or hydrous oxide. No sulphides were present. It was questioned whether the specimen exhibited was a genuine native product.

A New Locality for Gypsum.—Mr. THEO. D. RAND announced his discovery of gypsum, as an efflorescence upon gneiss, at a quarry near Darby, Pa.